

sessions by Hip Fracture Nurse to all nursing staff, mobilisation algorithm agreed with physiotherapists, NoF bleep to equipment managers and a new NoF proforma highlighting pressure area inspection.

A re-audit of 26 NoF patients between May–June 2010 completed the audit cycle.

Results: We showed significant improvement across all the standards. Of note twice daily pressure sore assessment improved from 3.7% to 38.5% and all patients were seen within 4 days of admission (previously 78.0%). Consequently development of new pressure sores fell from 22.0% to 4.0% and there was a reduction in the pressure sore grade 2 or above from 7.4% to 0%.
Conclusions: Pressure area care has improved significantly compared to the original audit and local and national benchmarks.

0786: RANGE OF MOVEMENT AS A DISCHARGE CRITERIA FOLLOWING KNEE ARTHROPLASTY; CAN IT BE SAFELY IGNORED IN A RAPID RECOVERY PROGRAMME

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Aim: Length of stay following knee arthroplasty commonly reaches 7 days. A recognised discharge criterion is a range of movement greater than 90° of flexion. We set out to determine whether a reduced length of stay with suboptimal flexion at discharge affects the overall range of movement.

Method: We recorded the length of stay and range of movement pre-op, on day of discharge and at the first follow up clinic, of 63 knee arthroplasty patients.

Results: The average length of stay was 4.4 days. The average range of movement at discharge was 4.4–79.4°. Only 17.5% of patients were discharged with more than 90° of flexion. At follow up, the average range of movement was 0.6–106.1°. Only 2 patients could not flex to 90°, only one of which was in the original group unable to flex past 90°. From the patients with an inadequate range of movement at discharge, only 1.9% had an inadequate range of movement at follow up.

Conclusion: Reduced length of stay and suboptimal knee flexion at discharge does not affect the final range of movement following knee arthroplasty. With this in mind, enhanced recovery and early discharge is encouraged, providing significant savings for hospitals.

0854: POTENTIAL FOR RECYCLING OF PACKAGING WASTE GENERATED BY ORTHOPAEDIC THEATRES IN A DISTRICT GENERAL HOSPITAL

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Background: Orthopaedic theatres generate a huge amount of waste product, with a significant carbon foot print. All theatre waste is currently disposed of via costly landfill and incineration. The vast majority of this waste is not, however, biohazardous and is recyclable. Many private hospitals in the US, are increasingly recycling hospital waste. In the current economic climate any potential to reduce costs should be explored.

Aim: Assess potential for recycling waste generated by orthopaedic theatres and potential cost-saving associated with this.

Method: A prospective assessment of all non-biohazardous paper, cardboard and plastic waste generated during one consultant's elective orthopaedic lists. Plastic was separated from paper/card and weighed at the end of each list for 3 months.

Results: Mean 1.5kg card/paper; 3kg plastic.

Conclusion: Extrapolated to circa 750kg card and 1.5 tonnes of plastic per annum for elective orthopaedic theatres. Local waste disposal firms have offered to recycle all this material at no cost. We currently pay our local waste disposal firm £500/tonne to dispose of this along with the bio-hazardous material. Therefore via the addition of 2 bins per orthopaedic theatre and simple re-education of staff waste disposal costs could be reduced by circa £1000pa, with an added environmental benefit.

1035: EXCESS CEMENT IN TOTAL KNEE ARTHROPLASTY: COMPARISON OF SURGEON GRADE

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The removal of excess cement around the implant components at total knee arthroplasty (TKA) is recommended to reduce micro-particulate

debris. (1) However the frequency and quantity of excess cement after TKA has not previously been investigated.

210 consecutive Press Fit Condylar (PFC sigma) primary total knee arthroplasties were evaluated in a total of 10 areas of excess cement on post-operative radiographs (AP and HBL). Excess cement was further graded as A (<2mm in longest axis), B (2–5mm) or C (>5mm). Comparisons were made between operating surgeon's grade (consultant vs. ST grade) regarding frequency and amount of excess cement.

There was no significant difference in the frequency of cases with excess cement when comparing surgeon grade (69% vs. 71% respectively, $P=0.83$). There was also no significant difference between the number of areas that had excess cement ($P=0.712$) or any difference between the amount of cement around the knee when comparing surgeon grade ($P=0.455$). Length of operation positively correlated with both the amount of excess cement ($T=0.202$, $P=0.0001$) and with number of areas of excess cement ($T=0.182$, $P=0.0005$).

The rate and quantity of excess cement appear to be independent of operating surgeon grade. They do however correlate with increased operation time.

1036: FASCIA ILIACA COMPARTMENT BLOCK SHOULD BE TAUGHT TO MORE SURGEONS IN TRAINING TO IMPROVE PAIN CONTROL FOR PATIENTS WITH FEMORAL FRACTURES

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Aim: The aim of this audit was to establish the uptake of fascia iliaca compartment block (FICB) in a busy district general hospital using local guidelines as audit standards.

Method: Patients with a fractured neck of femur (NOF), fractured femoral shaft or peri-prosthetic fracture were identified at a single time point. A retrospective case note review was conducted to identify those receiving FICB. Exclusions included: known coagulopathy; oral anticoagulants; sensitivity to local anaesthetic; previous vascular surgery in the affected limb; inability to identify the femoral artery.

Results: In total, 18 patients met the inclusion criteria (17 fractured NOF / 1 proximal femoral fracture). Only 23% received FICB pre-operatively. All were given during weekdays, with 75% taking place during working hours. The acute pain team administered 75% of blocks and the remainder administered by the on-call anaesthetist. No surgeons performed FICB during this audit.

Conclusion: FICB is a regional anaesthetic technique available to surgeons, anaesthetists and acute pain nurses. It can be conducted using simple anatomical landmarks with basic equipment and little training. The use of FICB would be increased if more surgeons were trained to perform the block. A training programme was initiated at this hospital to increase its uptake.

1095: A RETRIEVAL STUDY: HISTOMORPHOLOGICAL ANALYSIS OF FAILED HIP RESURFACING IMPLANTS

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Aim: This study aims to explore the possible factors associated with failure of metal-on-metal resurfaced hip through histomorphological analysis of six retrieved femoral head specimens.

Methods: Six un-decalcified specimens were prepared for radiography and hard-tissue histology. Cement mantle thickness and penetration were quantified and cement interface was studied for degree of bone contact. Bone vitality and areas of bone resorption activity were quantified under light microscopy.

Results: Out of the six specimens, two were found to have no cement layer. Most specimens showed extensive bone changes under the implant. Areas of radiolucencies were found to be filled with fibrous tissues. In such regions, there was more observable resorptive activity. Cement penetration was shown to be excessive for all cemented specimens. Percentage bone contact was higher on the medial side ($p=0.386$). Percentage occupied osteocytes increased more proximally to the implant ($p=0.082$). Due to the small sample size, the difference in percentage resorption activity for the different bone regions were not significant ($p=0.779$).